

**BEFORE THE ENERGY COMMISSION
OF THE STATE OF CALIFORNIA**

In the Matter of:
Renewable Portfolio
Standard Implementation

) Docket 03-RPS-1078

***Comments of Pacific Gas and Electric on the Needs Assessment
for a Western Renewable Energy Generation Information System
Draft Report***

Introduction

Pacific Gas and Electric (PG&E) appreciates the opportunity to comment on the Needs Assessment for a Western Renewable Energy Generation Information System (WREGIS) and to participate actively in the collaboration between the California Energy Commission and the Western Governors' Association on their ambitious project to unify renewable generation tracking in the Western Interconnection. PG&E submits these comments to the California Energy Commission and the Western Governors' Association for consideration by the Renewable Energy Tracking and Certificates (RETAC) Committee with emphasis on the needs that have been identified to facilitate California's Renewable Portfolio Standard (RPS) Implementation. PG&E is aware that the RETAC Committee's outlook for the development of the WREGIS system needs to consider requirements of other states and provinces; however, PG&E feels compelled to offer the California perspective and consider what is best for California in terms of recommending the optimum system. We will leave it to the RETAC Committee to harmonize the needs of California with the data needs required to meet the multi-state initiatives to arrive at an optimum system.

For California RPS implementation, the identification of issues to be considered in an accounting and tracking system were developed in collaboration with California stakeholders in a series of workshops, written comments, hearings, and finalized in the Phase 2 RPS Implementation Report published by the CEC. As identified in the Phase 2 Report, SB 1078 and SB 1038 require the following minimum requirements:

1. Verify compliance with the RPS by retail sellers,
2. Ensure that renewable energy output is counted only once for the purpose of meeting the RPS of this state and any other state,
3. Verify retail product claims in this state or any other state and,
4. Track the amount of renewable electricity produced and sold by SEP-eligible renewable generators on a monthly basis.

The California Public Utilities Commission's (CPUC's) June RPS Decision, D.03-06-071, recommended that the CEC move forward with establishing an accounting system that would facilitate Renewable Energy Certificate (REC) tracking. The draft Needs Assessment Report has clearly taken the necessary first steps by scoping the elements of a comprehensive system to support tracking and accounting of renewable energy generation and registration of RECs in the Western Interconnection.

RETAC Committee Specific Questions

- 1. State Policy and Program Needs:** *Should WREGIS be designed to facilitate imports and exports? Please be clear whether you mean imports and exports between states that are part of WREGIS, or between WREGIS and other tracking systems. Proponents should indicate the type of information you believe is necessary to perform either function.*

PG&E endorses the ability of the system to facilitate tracking of renewable energy between states and, as appropriate, between Canada and Mexico, assuming safeguards to verify generation claims will be applied consistently and transparently. The uses of the system will be driven largely by the ability to have confidence that the information provided is legitimate and robust.

To the extent practical, WREGIS should be able to interface with other state and regional tracking systems. The most important benefit of this inter-system tracking is the ability to identify renewable generation exports that have sold or otherwise traded their attributes to areas outside of the Western region. However, in terms of priorities, PG&E believes the capability to track imports from other regions should be given a lower priority at this time, as eligibility, at least for California RPS, is limited to the WECC. As both the renewables markets and WREGIS mature, more time should be devoted to deciding whether or not regional import considerations make sense for the policy goals of the states in the Western region. If the RETAC Committee pursues developing WREGIS such that it is capable of importing generation from other tracking systems, it is important that the renewable generation data meet WREGIS standards for certification and verification in order to maintain the integrity of the data.

Finally, ensuring that data are sufficient to track the eligibility of the generation to meet the variety of state renewable programs could become burdensome and will vary by state and province. It would clearly be preferable to have a field(s) clearly indicating the MWh eligible in California, Oregon, etc, but this may not be practical. For example, generation that is eligible in Nevada RPS may not be eligible in California, but it may be eligible in Oregon or Arizona.

2. *State Policy and Program Needs: What, if any, additional static or dynamic data are needed to support air quality and regional haze programs, and information disclosure and electricity labeling requirements?*

The proposed WREGIS data appear adequate to make accurate statements on the information disclosure and electricity labels. Looking forward, PG&E understands that legislation will soon be proposed in California to modify the disclosure label and to redefine the term "REC." The legislative and the WREGIS design efforts should be coordinated in a way that state legislation does not inhibit use of WREGIS, and that decisions made for WREGIS do not deter or otherwise constrain the California legislature from making common sense changes to the label.

With respect to regional haze and air quality programs, as far as PG&E knows, no data related to renewable generation would provide any level of support to programs.

3. ***Technologies to be included in WREGIS:*** *Should WREGIS include small, customer-sited renewable generation and solar water heating, and if so, how? Proponents should indicate whether they are willing to participate in the development of data measurement, collection, and verification methodologies.*

PG&E endorses the concept of tracking and accounting for all renewable generation, including distributed generation, particularly given that the development of these technologies are subsidized with public monies and often given waivers to non-by-passable charges incurred by other utility customers. However, given that the size of these systems range from less than 1 MW up to 30 MW, a practical breakpoint should be designated for systems that would have an individual account within WREGIS versus systems that should be aggregated by a designated third party that would have one individual account. Aggregation will necessarily need to be categorized in terms of eligibility for various renewable portfolio standards or other state initiatives.

4. ***Information Requirements:*** *Should generator information that is voluntarily provided undergo the same level of verification as other information in the database? Or would it be acceptable if WREGIS tracked information that was voluntarily provided (see list on page 7 of the Report), but make no claims as to the accuracy of the information if it is self-reported?*

All information needs to be adequately verified. Allowing lower standards for voluntary information could compromise the integrity of the whole system.

5. ***Information Requirements:*** *Are there any other static or dynamic data categories or characteristics that may be useful, or for which WREGIS users may want to use to differentiate RECs or generators in the database? Please also indicate how tracking this information will be beneficial (e.g., product differentiation or branding, certification verification, ability to access markets, etc.).*

As discussed above, each state or province is likely to have differing eligibility requirements, classifications, and specific renewable generator identifiers.

PG&E's primary concern is certification and verification. Thus, PG&E recommends that the number of data fields available to record generator identification or Federal Energy Information Administration (EIA) numbers be expanded to readily accommodate each participating state or province's needs. For example, PG&E would like to see the following data fields be considered for inclusion in WREGIS:

- ❑ California Energy Commission identification number
- ❑ RPS certification numbers
- ❑ Independent System Operator (ISO) / grid operator resource identification number
- ❑ Interconnection Point
- ❑ Delivery Points

Maintaining consistency with already existing federal reporting requirements should be a priority. The RETAC Committee should leverage existing databases that contain similar information. For example, the Federal EIA has a great deal of information by plant. It was surprising that of the fourteen states or provinces surveyed, only three were sure of their information. The nameplate, net normal operating capability, location, and generation are all available from existing publicly available databases. Specifically, FERC Form 1 information might provide the best publicly available information and an added benefit is that information is audited. The RETAC Committee should also explore ways to streamline the process of data collection and leverage existing data sources, particularly those that have verified information.

6. *Need for updating Information:* *Is there any other data from page 8 of the Report that should be periodically updated to meet state policy or certifications needs. How frequently should such updates occur?*

It appears that most of the static information could simply be updated on an as needed basis; however, a simplified or streamlined verification should be considered to provide the end users a prod to review their information, at least annually, and facilitate updating information that may have changed over the

previous year. The communication could be as simple as an email requesting review of the current status of the data contained in WREGIS.

PG&E agrees with the report's recommendations on the static information that needs to be updated annually. In addition to the static data identified on page 8 that should be updated annually, PG&E would like the RETAC Committee to consider updates to generation categorization as existing, baseline, new, or incremental. While the CPUC is still working out the categorization scheme, PG&E anticipates that the designation for a particular generator will change over time, if not on an annual basis. That is, what is new or incremental generation for one year could be categorized as existing or baseline generation for the following year. This assumes that baseline does not remain static but instead changes on an annual basis consistent with the obligated entities, current compliance percentage. For example, there may be a 2002 baseline and then a 2003 baseline that includes the prior year's incremental generation, etc. Additionally, the RETAC Committee should consider attestation by the generator on an annual basis that the facility complies with California labor requirements.

- 7. *Emissions Information:*** *With respect to emissions data, are these data are presently collected in your state, and by whom? Would these data be available for use?*

At this time, there are no emissions data tracked for renewable generation. If the question was posed to address avoided emissions resulting from the offset or reduction in baseline emissions (and not projected emissions) at fossil plants, to the extent such data are collected, they should distinguish between emissions eligible for credit under the Clean Air Act (CAA) and those that are not (i.e., growth).

- 8. *Emissions Offsets:*** *Should WREGIS accept emissions "offset" data, as distinct from emissions data, and if so, under what circumstances? Would it be acceptable if this information is voluntarily provided and thus tracked by WREGIS but not verified or substantiated by WREGIS?*

PG&E's priority for utilizing WREGIS will be compliance with RPS mandates and PG&E is not likely to find much value for emissions or emissions offset data tracked through WREGIS unless federally approved state clear air plans are modified to clearly delineate under what circumstances such offsets could be issued and used within the existing CAA regulatory systems and emissions trading markets.

Moreover, PG&E is concerned that including any emissions or emissions offset information in WREGIS could encourage false or even fraudulent claims by renewable energy marketers. If these types of inaccurate offsets were used to offset an emission source regulated under the Clean Air Act, the likely result would be litigation. Any voluntarily provided emissions offset data would be even more prone to abuse and should not be allowed unless adequately certified. Lawsuits or criticism of data tracked in WREGIS could disrupt their use and the overall integrity of the system could be called into question.

If the RETAC Committee pursues the inclusion of this data, these CEC and the WGA should put in place a process to guarantee that such data are accurate to within +/- 5 percent. This means that the emission factors used must be much more accurate than those currently being used by renewable energy marketers. PG&E would recommend that any emissions data included in WREGIS be appropriately validated and meets a minimum quality standard. If this data quality meets some minimum standard, the information might prove useful.

An additional consideration in developing emissions tracking is that offsets (e.g., for NO_x or SO_x) have never been quantified or assigned to renewable energy projects. Before such offsets could be legally issued, generators would have to meet the stringent documentation provisions required by the (CAA). A state implementation "clean air" plan would first need to be established which includes language formally recognizing and accounting for such offsets. The plan would need to be federally approved by the US Environmental Protection Agency. This

would be a very complex and difficult undertaking and would take years to accomplish. Currently, no state has such an implementation plan.

One other item for the Committee to be aware of is that approximately thirty environmentalists and states initiated a lawsuit against the US Environmental Protection Agency (EPA) to enforce the requirements of the CAA. The suit requests that the government regulate CO₂ as a "pollutant" under the CAA. If the suit is successful, the result will be that CO₂, like SO_x and NO_x, will be subject to a "no net increase" cap and trade program in California and elsewhere. These emission reductions are accounted for within the existing air quality regulatory systems and thus are already retired. Counting these reductions in the REC would be a form of double counting.

Even if it some day becomes possible to include emission credits in an REC, the reductions are based on a comparison with historical baseline emissions and not with future projected emissions, i.e., the reduction credits cannot take credit for reducing emissions associated with future growth (population growth, load growth, etc.). As a result, the emission reduction credits would be much smaller than currently anticipated by those who want to include and market these attributes in their RECs. Thus, it is unlikely that the residual offsets from renewable energy projects will be large enough to justify the effort and cost of quantification and any such claims made by renewable energy marketers would need to be adequately verifiable. Therefore, PG&E believes that some minimal threshold data quality should be met before committing resources dedicated to tracking emission offsets.

Because PG&E has such a low potential need for the proposed emissions data, any incremental cost to develop emissions tracking capability should be paid for by those who will use this information, i.e., marketers, brokers, traders, etc.

9. *Disaggregated RECs:* *Do you have any specific comments on the recommendations related to disaggregation of RECs in the WREGIS (page 9 of the Report)?*

PG&E advocates maintaining the integrity of the REC as a whole, and disfavors the tracking and trading of RECs that have been broken into component parts. The “all attributes are included approach” is consistent with the framework established by the CPUC in D.03-06-071. In that decision, the CPUC determined that all attributes associated with electricity production would be transferred to the obligated entity along with the output of the generation. RECs that are not intact would not be eligible for compliance with the California RPS. Accordingly, the proposal to retire RECs that have unbundled any of their attributes appears sound. The additional complication of tracking unbundled RECs is unnecessary at this time, and PG&E shares the concerns expressed in the Needs Assessment Report that there is potential for fraud and that the rights of consumers need to be protected.

10. *Bundling REC with electricity:* *What are your thoughts on the importance, and the feasibility of tracking the commodity electricity sales within WREGIS in addition to tracking the ownership and movement of RECs?*

The California Public Utilities Commission’s (CPUC) June 2003 RPS decision, D.03-06-071, adopted rules for California’s three IOUs that require renewable energy and attributes to remain bundled to be eligible to meet RPS. At this time, the CPUC has not established rules dealing with the unbundling of energy and attributes and, ultimately REC trading. However, it is anticipated that this issue will be taken up in a second phase of the CPUC’s rulemaking in relation to compliance rules for Community Choice Aggregators (CCAs) and Energy Service Providers (ESPs). Therefore, at this time, the California RPS does not require that WREGIS track unbundled commodity sales separate from RECs and, thus, current policy dictates that it is unnecessary. However, there is a strong possibility that rules governing CCA and ESP RPS compliance would allow for the purchase of RECs to satisfy retail sellers’ RPS compliance. As such, PG&E

would advocate that the RETAC Committee give strong consideration to facilitating these types of transactions.

11. *Generation Tracking Intervals:* *What date/time stamp should be given to RECs that are issued by WREGIS? Proponents of tracking generation more frequently than daily and of a 'peak/off-peak' designation, should provide additional explanation of their rationale.*

At this time, PG&E does not have a well-developed understanding of how “best” to bundle the energy to be tracked. Monthly output seems reasonable; however, given the wide variety of programs this system proposes to support, there may be a need to aggregate the data with more granularity. At a minimum, reported generation data should be consistent with the monthly billing cycles and settled statement amounts between the generator and purchaser. PG&E will defer to the Committee’s recommendation to make the appropriate choice weighing all the relevant variables.

12. *WREGIS Administration:* *Do you have opinions on what organization or agency should administer the WREGIS?*

Although, PG&E has not had an opportunity to fully consider this issue, we offer some limited comments for consideration. The Report has identified several agencies that would have the requisite knowledgeable needed to manage this type of system. However, selecting an independent third party, preferably a non-profit, to provide the administration of WREGIS has some appeal, in that a third party would provide some assurance that any particular stakeholder does not exercise undue influence over the system operations. If a third party administrator is chosen, a board, comprised of WREGIS stakeholders, should be put in place to oversee operations and administration.

At a minimum, the RETAC Committee should learn from the experiences of REC tracking systems in place in other parts of the U.S. and abroad as well as examine tracking systems used in other trading markets (e.g., futures markets, stock markets, emission trading markets) or similar situations (e.g., federal reserve

monetary tracking) to view which structures promote liquidity, lower user costs, and, above all, integrity.

13. *WREGIS Design and Development:* *Do you have any comments on the WREGIS design and development process laid out in Section 9 of the Report or in the workshop?*

The RETAC Committee should ensure there is sufficient opportunity for stakeholders to participate on the various committees. An effort should be made to balance participation on committees so that all states and stakeholder groups are fairly represented.

14. *Status of Policies, by State:* *State regulators are invited to review the accuracy of Table 9 of the report, and provide accurate updates.*

This question is not applicable for PG&E.

General comments about WREGIS development

Cost Allocation

One issue that was absent from the report was the cost of the system and how the cost would be allocated among users. Given the variety of data fields that are under consideration for inclusion in the system, and assuming that the granularity and variety of information to be tracked will play a significant role in the cost of the system, PG&E would like to advocate that the start-up costs, or fixed costs for system development, be tied directly to the cost drivers.

PG&E raises this issue because discussion at the October 30, 2003, workshop held in Sacramento indicated that similar systems' start-up costs were recovered on a purely transactional basis. While this may be fine for ongoing operations, maintenance, and administration costs, PG&E feels that system development costs should be clearly separate and allocated to stakeholders based on cost drivers such as data fields requested or granularity of data required in order to share the burden fairly of

developing the multi-state system. Key development costs are not primarily driven by transaction volume, but rather by factors such as degree of customization and flexibility required to track particular functions.

The concern PG&E has here is obvious. California, by sheer volume of transactions, relative to other states and provinces, may unfairly allocate costs that were not necessary for implementation of the California RPS. To unitize all aspects of the development costs and allocate the data development needs of other states and provinces to California would be unfair and burdensome.

Aside from the issue of cost allocation, PG&E wants to reinforce the Needs Assessment Report's goal of achieving cost savings from economies of scope and scale.¹

To ensure that these cost savings from scope growth are legitimate and realized, it is important to ensure that:

1. The incremental cost of including the other function or geographies is properly accounted for. The committee needs to consider both explicit (i.e., materials, network costs, consultant fees, system staff) and implicit (i.e., participants' resources gathering and inputting required data) costs.
2. The demand for these other function or geographic markets is sufficient to pay for their share of the burden their participation causes plus some of the common costs.
3. To the extent that participation is mandatory, participants will be relieved of any duplicative reporting or tracking payment burdens or receive sufficient compensatory benefits.

REC Market Making

¹ To achieve its system goals, the report elaborate on various "functional characteristics" on page 4. One termed "flexibility" states that "supporting a variety of needs helps spread the cost of the system design and operation, assuming such flexibility does not increase system cost significantly." Another, labeled "broad geographic scope" expects to achieve economies of scale.

PG&E would like to endorse the recommendation of the RETAC Committee that advocates that separation of the WREGIS tracking and accounting from any market making functions. Market making and RPS compliance tracking should not be administered by the same agency. Merging these functions can lead to conflicts of interest or unfair advantages that can damage the integrity of the system.

Emissions

Emissions data are not needed for RPS compliance purposes. Emissions avoided as a result of renewable generation projects are already accounted for under the Clean Air Act. The Center for Resource Solutions (CRS) standard specifically prohibits these attributes from being included in Tradable Renewable Certificates (TRCs). TRCs are equivalent to the RECs concept under consideration in California. The CRS handbook states, “Claims of SO₂ or similar pollution benefits in a cap-and-trade environment are problematic . . . More problematic for renewables are proposals in Congress to establish nationwide annual caps on NO_x, CO₂, and mercury along with a new and stricter national SO₂ cap.”

In California, NO_x emissions and other criteria pollutant emissions are regulated under the principle of “no net increase.” This requires any increase in emissions from permitted sources to be offset by an even larger emission reduction from somewhere else [within the same air basin]. Over the past 30 years, a complex system of emissions offsets has developed in response to this regulatory framework. Thus, emissions reductions of criteria pollutants are already governed within a “cap and trade” system.

As a result of the “no net increase” principle, emissions reduction credits are valued by those seeking to site new facilities and offset their emissions. As a result, banks have long been in place at the local air district level for emissions reduction credits. The Air Resources Board tracks the amount of credits available in each air district and the costs of each emissions reduction credit transaction.

Emissions reductions that may occur from the use of renewable energy are likely already accounted for within the existing system for regulating air quality emissions. California's federally approved clean air plan does not acknowledge emissions benefits (i.e., emissions reductions) from renewable energy. Asserting that emission reductions are a part of TRCs or RECs appears to conflict with the decades-old system of air quality management in place throughout California and throughout the United States. CO₂ is more likely than not to be similarly regulated under the Clean Air Act in the future. Including the provision to track attributes that are not allowed to be included in a REC seems to be giving a false impression that the value of this offset is embedded within the REC attributes being traded and tracked in WREGIS.